CONTAMINATED MEDIA FORUM

(Formerly – Contaminated Soils Forum)

Meeting Minutes

Bob Martinez Center - Room 609
2600 Blair Stone Rd., Tallahassee
November 20, 2013 – 1:00 PM – 5:00 PM (EST)

1:00 PM: Meeting called to order.

Jorge Caspary, Director, Division of Waste Management, welcomed everyone and said he wants an open forum to explore toxicology, possible changes to the rules and regulations. The Division is open to ideas and changes. Start with the low hanging fruit and target springtime for simpler issues. Issues that require rulemaking will take more time and could go well into next fall and later. Also open to meeting at other venues around the state and thanked everyone for coming.

Plan: To have scalable work groups with leads on a variety of topics as determined by the group.

1. **Direct Exposure numbers in soil** – Exposure and leachability considerations; and need for ICs/ECs
   a. How realistic are the soil direct exposure numbers as you go deeper? Is there a maximum depth to which the direct exposure numbers should apply? If so, would you still need controls (ICs) to document that contaminated soil was left at depth?
   b. An Institutional Control (IC) is an appropriate way to ensure current and future owners are aware of the soil contamination. (see further discussion on ICs below)
   c. There was some discussion that construction activities may bring deeper soil to the surface. Workers in such areas would have to be aware of the contamination to be able to protect themselves and to handle the soil appropriately. However, the exposure scenario may be different than the default commercial/industrial scenario.
   d. An Engineering Control (EC) could still be necessary. A visual demarcation of the EC, such as Geo-textile fabric, makes a good cue for anyone digging in the area. May be appropriate to update the EC guidance.
   e. There could still be leachability concerns for any soil left at depth. May also be a good time to re-evaluate how we measure leachability to take the mass of contaminants into account and the potential movement of that mass to groundwater. The ITRC has good existing guidance on such evaluations.
   f. May also need to address the "3X Rule" when using 95% UCL (62-780.680(1)(b)1.d.(II), F.A.C., similar restriction also under .680(2) and .680(3)) if soil above the residential direct exposure number will be left in place.

2. **Background Determinations**
   a. Evaluation and determination of background can be problematic on some sites. Widespread legal use of arsenical herbicides in agricultural, industrial and recreational areas can lead to elevated arsenic concentrations in soil and groundwater that are not related to the site discharge. Arsenic, and other metals, are also naturally occurring. PAHs unrelated to the site discharge are common in urban and suburban areas from sources such as asphalt or vehicle exhaust.
   b. The issue with background is not limited to arsenic and PAHs but these are the most common chemicals for which background issues arise. Whatever guidance is developed from these discussions should be applicable to all chemicals.
   c. Florida Statutes provides clear guidance on treatment of natural background but not on anthropogenic background.
   d. The Department should consider making a determination on what is background in a given area.

i. Background based on a localized area is the best science but is difficult to implement.
    1. Regional or multi-county background may be easier to determine and implement.
ii. Have to look at geochemistry of soils or sediment.
iii. May be able to summarize existing regional studies or may be able to leverage university resources for site-specific determinations.
iv. Department is working on developing a database of background studies and analytical data.
v. Possibility of bringing in Florida Geological Survey expertise as scientific experts and contract to them and include as part of the group.
vi. Miami-Dade is completing a county-wide study of arsenic in soil.
    1. Dramatic change from one part of county to the other.
    2. Can be correlated with historical land use.
vii. Consideration for nonpoint sources as contributors to anthropogenic background?

e. Issues:
    i. There are a lot of data sets and the data may not be uniform.
    ii. Don't forget that the goal is an SRCO from the Department and how background will be handled in the SRCO.
        1. Banks or lenders may have liability concerns with background determinations.
    iii. What to tell landowners with regard to clean up if "background" contamination will be allowed to remain? Especially if the current landowner is not the PRSR.
f. An Anthropogenic Guidance Document was created in a previous CSF.
    i. What is the status? (No one knew)

3. **Exposure Scenarios** - Guidance for developing non-default exposure scenarios in RMO III risk assessments.
    a. Generating new default numbers is not what RMO III should be, RMO III closures should be based on a reasonable and defensible methodology and include an analysis of receptors.
        i. Development of exposure scenarios is not about coming up with new default numbers or new scenarios.
            1. For example, the default "park" scenario doesn't work for all sites:
                a. Parks in different settings will have different usage patterns (e.g., urban park vs. wildlife area).
                b. Not enough data on attendance at parks, the problem is that you are left with assumptions because you don't know on how often the same people return to the park.
    b. Should develop a methodology for non-default exposure scenarios to include:
        i. How to identify receptors.
        ii. Parameters to be considered.
        iii. How to document exposure assumptions and make sure they are reasonable and defensible.
        iv. Accounting for changes in land use over time.
    c. Additivity and Apportionment should also be re-examined as part of this exercise.
    d. Consideration of revising Chapter 62-777 values to reflect updated toxicological information and probabilistic risk assessment (PRA) approach.
        i. Begin with review of how science has changed and consequences of changes.
        ii. Should Probabilistic Risk Assessments (PRA) be used to calculate new CTLs?
        iii. Update 62-777 tables at a later date.
            1. May want to remove some chemicals from 62-777 if never encountered.
            2. Need a procedure for documenting CTLs not listed in 62-777 but derived using the procedures described in 62-777.

4. **Institutional Controls (ICs) and Engineering Controls (ECs)**
    a. Are ICs needed for sites where organoleptics and secondary standards are the only concerns and there is no known potable water use in the area?
        i. Need to make sure we look at other possible pathways even if people have connections to a potable water supply.
            1. Neighbors could have private potable wells.
            2. Could have private wells for irrigation or pools.
    b. Are ICs needed for road Rights of Way (especially DOT)?
        i. DEP and DOT working on an agreement, may have a mechanism to deal with it.
        ii. DOT doesn't always have deeds and the process will be an IC.
            1. The control will be listed on the right of way use map – multilevel control.
            2. These sites would be listed on the Institutional Controls Registry.
    c. Need to review list of prohibited land uses in the IC template.
        i. Currently based on NAICS codes, may be too broad or too many included.
    d. Should this forum [CSF] work on implanting the recent IC memo (11/01/13)?
        i. OGC will be drafting language, due in January. We can review at that time.
    e. Can hydraulic control be used as an EC under 62-780 to obtain an SRCO?
        i. Differentiate between passive hydraulic control (e.g., slurry wall) versus active (e.g., pumping to maintain).

5. **Surface Water**
    a. Consider the use of the surface water standard as a CTL when the property abuts a surface water body (with groundwater use restrictions on the property).
        i. Would still need to consider leachability to surface water.
    b. Point of measurement of compliance with surface water standards can be problematic.
        i. Changing point of compliance would require statutory change.

6. **Brownfields**
    a. Consider allowing funding for a non-abutting property that is within the plume.
        i. This would require a legislative change.

7. **Guidance Documents** – make more readily available
    a. ITRC Guidance
        i. Would like to see a list of ITRC guidance documents accepted by DEP. Could include a statement that DEP concurs with the guidance or somehow limits its application due to State law or policy concerns.
        ii. It is easier to use summarized guidance document vs ITRC document.
        iii. Vapor Intrusion – EPA recommendation and ITRC – need a group.
    b. List of DEP guidance documents needs to be added as a topic.

8. **Ecological Risk Assessment Guidance**
    a. FDEP hopes to have draft in 2-4 mos. Maybe Jan or Feb.
    b. Focus is on the process rather than developing "Eco Numbers."

9. **Regulatory Policies for consideration**
    a. Alternative delineation
        i. Delineation of an industrial site in an industrial area only to industrial, not residential.
        ii. Is it appropriate to delineate into roadways and medians?

iii. Can site-specific exceptions to delineation be allowed?
iv. Can anthropogenic background be the limit of delineation?

b. Definition of a discharge – may not be a release but levels can be above the residential numbers
c. Application and interpretation of Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) to contaminated sites.
d. Should we look at emerging compounds like wastewater? (Note: The group decided not to pursue this topic at this time.)
   i. A lot of work has been done to identify those chemicals.
   ii. Possible overlap with CWA.
   iii. Good topic but new topic nationwide unless FL wants to be the leaders in this fight.
   iv. Emerging issues not ripe yet.

10. **Workgroups** (Verify Volunteers)
    a. Direct Exposure, IC/EC and Leachability
       1. Laurel Lockett
       2. Richard Lewis
       3. Mike Petrovich
       4. Lisa Duchene
       5. Wilbur Mayorga
       6. Kendra Goff
       7. Joe Applegate
       8. Alex Webster
    b. Background
       1. Bob DeMott
       2. Wilbur Mayorga
    c. Ecological Risk
       1. Brian Dougherty
       2. Chris Saranko
    d. 62-777/CTLs
       1. Chris Teaf
       2. Steve Roberts
    e. Groups –have a list of topics and a leader for each group.
       i. Launch each workgroup individually.
       ii. CSF to meet periodically at different locations around the state.
          1. Need to involve the public in case something is missed.
          2. Last meetings started with broad topics then broke off and had individual meetings which worked well.

11. Next Meeting and Initial Goals
    a. Next forum around end of February.
    b. Workgroups meet prior to February meeting.
    c. Each Workgroup needs to assign a POC.
    d. Brian will set up initial teleconferences with workgroups.
    e. Focus on low hanging fruit by February.
    f. February meeting location – Pending.
    g. Will post announcement in the FAW/FAR and post agenda earlier.

4:45 PM – Meeting Adjourned